Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address*: PATRICIA SKEGAN
JIM HELMER
436 S 3RD W
MISSOULA, MT 59801

2. *Type of action*: APPLICATION FOR BENEFICIAL WATER USE PERMIT 76M-30028713

3. *Water source name*: GROUNDWATER

4. *Location affected by project*: NENE SECTION 9, T 12 N, R 20 W, MISSOULA CO.

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*: THIS IS AN APPLICATION FOR A WATER RIGHT PERMIT TO USE GROUNDWATER FROM A WELL FOR DOMESTIC AND LAWN AND GARDEN PURPOSES. THE REQUESTED DIVERSION IS LOCATED WITHIN THE BOUNDARIES OF THE HAYES CREEK CONTROLLED GROUNDWATER AREA. ALL NEW USES OF GROUNDWATER WITHIN THIS AREA REQUIRE AN APPLICATION FOR BENEFICIAL WATER USE PERMIT. OUTSIDE THE CONTROLLED GROUNDWATER AREA, A SIMILAR PROJECT WOULD BE EXEMPT FROM THE PERMIT REQUIREMENTS. THIS APPLICANT IS REQUESTING TO USE GROUNDWATER FROM A WELL AT A FLOW RATE OF 25 GPM AND A TOTAL ANNUAL VOLUME FOR THE STATED PURPOSES OF 3.5 ACRE-FEET. THE PROPOSED DIVERSION IS AN EXISTING WELL THAT WOULD BE SHARED BY TWO PROPERTIES IF THIS PERMIT IS ISSUED. THE EXISTING USE IS PERMITTED UNDER WATER USE PERMIT 76H-THIS APPLICANT HAS REQUESTED AND RECEIVED A VARIANCE FROM THE DEPARTMENT'S REQUIREMENTS FOR AQUIFER TESTING. THE APPLICANT HAS USED A NEARBY AQUIFER TEST REPORT TO DEVELOP INFORMATION ABOUT THE PROPOSED DIVERSION AND HAS PROVIDED A REPORT THAT IS ACCEPTED AS CREDIBLE BY DEPARTMENT HYDRO-GEOLOGISTS.

   THE DNRC SHALL ISSUE A WATER USE PERMIT IF AN APPLICANT PROVES THE CRITERIA IN 85-2-311, MCA ARE MET.

6. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

STATE HISTORICAL PRESERVATION OFFICE
MONTANA NATURAL HERITAGE PROGRAM

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: SEE GROUNDWATER SECTION BELOW

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: SEE GROUNDWATER SECTION BELOW

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: NO SIGNIFICANT IMPACTS.

THE PROPOSED PROJECT WELL IS LOCATED IN THE NENE SECTION 9, T 12 N, R 20 W. THE WELL IS 120 FEET IN DEPTH AND WOULD BE USED TO DIVERT A FLOW RATE OF 25 GPM AND A VOLUME UP TO 3.5 ACRE-FEET DURING THE YEAR-ROUND PERIOD OF USE FOR DOMESTIC AND LAWN AND GARDEN. THE PROPOSED DIVERSION IS AN EXISTING WELL THAT IS BEING USED BY AN ADJACENT PROPERTY FOR DOMESTIC AND LAWN AND GARDEN PURPOSES. THIS EXISTING USE IS PERMITTED UNDER WATER USE PERMIT 76H-108731.

IN ORDER TO COMPLY WITH THE DEPARTMENT NEW APPROPRIATIONS RULES, THE APPLICANT HAS REQUESTED AND RECEIVED A VARIANCE TO THE AQUIFER TEST REQUIREMENTS. TO MEET THE REQUIREMENT, THE APPLICANT HAS INTERPRETED DATA GATHERED FROM A 24-HOUR PUMP TEST OF A NEARBY WELL. USING THIS INFORMATION, THE APPLICANT HAS PREPARED AN AQUIFER REPORT TO DEMONSTRATE THE PHYSICAL COMPONENTS OF THE AQUIFER AND DETERMINE THE PROBABLE IMPACTS TO THE AQUIFER AND OTHER DIVERSIONS WITHIN THE AQUIFER AS A RESULT OF PUMPING THE PROJECT WELL. IN THE PREVIOUS AQUIFER REPORT, NEARBY WELLS WERE MONITORED DURING THE

PUMP TEST TO DETERMINE IMPACTS TO THOSE WELLS. POSSIBLE IMPACTS TO THOSE WELLS OR ANY OTHER NEARBY WELLS WERE DETERMINED TO BE VERY MINOR. IMPACTS TO NEARBY SURFACE WATER SOURCES WERE CONSIDERED AND DETERMINED TO BE NEGLIGIBLE DEPARTMENT HYDRO-GEOLOGISTS REVIEWED THE APPLICANT'S REPORT AND DETERMINED IT TO BE CREDIBLE.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: NO SIGNIFICANT IMPACTS.

A LICENSED WELL DRILLER CONSTRUCTED THE PROPOSED PROJECT WELL TO A DEPTH OF 120 FEET. THE WELL HAS A 6-INCH DIAMETER CASING FROM-2 FEET TO 45 FEET AND A 5-INCH PVC CASING FROM 45 FEET TO 120 FEET. THE STATIC WATER LEVEL MEASURED IN THE WELL IS 38 FEET. A 24-HOUR PUMP TEST OF THE WELL WAS COMPLETED. THE TEST RATE WAS 20 GPM FOR 1 HOUR. THE WELL LOG FOR THE SUBJECT WELL INDICATES THE TIME OF RECOVERY AFTER PUMPING AT 0 HOURS. INFORMATION PROVIDED BY THE APPLICANT INDICATES THAT THE WELL IS CAPABLE OF MAINTAINING THE REQUESTED FLOW AS WELL AS THE PREVIOUSLY PERMITTED FLOW AND IS ADEQUATE FOR THE PROPOSED PROJECT.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: NO SIGNIFICANT IMPACTS.

THE USFS AND BLM SENSITIVE WESTSLOPE CUTTHROAT TROUT ARE IDENTIFIED IN THE BITTERROOT RIVER AND HAYES CREEK, NEAR THE PROJECT AREA. THE PROPOSED PROJECT WOULD HAVE NO IMPACTS TO THE IDENTIFIED TROUT POPULATION.

THE HABITAT POLYGON FOR THE BLM SPECIAL STATUS, THE USFWS THREATENED AND THE USFS THREATENED CANADA LYNX COVERS THE AREA OF THE PROPOSED PROJECT.

OTHER SPECIES NOTED IN THE SEARCH AREA ARE: GRAY WOLF, GRASSHOPPER SPARROW, WESTERN SKINK, FLAMMULARED OWL, BLACK-BACKED WOODPECKER, BITTERROOT MOUNTAIN SNAIL, WOLVERINE, FISHER AND BALD EAGLE.

THE PROPOSED PROJECT WOULD HAVE NO IMPACTS TO THE IDENTIFIED HABITAT SINCE THE PROPOSED USE IS CONSISTENT WITH EXITING USES.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: NO IMPACTS.

THERE ARE NO WETLANDS IDENTIFIED IN THE AREA OF THE PROPOSED PROJECT.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: NO IMPACTS.

THERE ARE NO PONDS IDENTIFIED IN THE AREA OF THE PROPOSED PROJECT.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: NO SIGNIFICANT IMPACTS.

GEOLOGIC MAPS OF THE AREA SHOW THE MOUNT SHIELDS FORMATION LIES BENEATH THE HAYES CREEK AREA OF THE PROPOSED WELL. THE MOUNT SHIELDS FORMATION CONSISTS MAINLY OF REDDISH FINE TO MEDIUM GRAINED QUARTZITE, ARGILLITE AND SILTITE. THE AREA IS OVERLAID WITH VARIOUS DEPTHS OF ALLUVIUM DEPOSITS CONSISTING OF SANDS, GRAVELS, SILTS AND CLAYS. LITTLE TO NO IMPACTS TO LOCAL SOILS WOULD BE EXPECTED AS A RESULT OF THE PROPOSED PROJECT.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: NO SIGNIFICANT IMPACTS.

CURRENTLY, THE PROPOSED PLACE OF USE IS A DEVELOPED RESIDENTIAL LOT SURROUNDED BY OTHER RESIDENTIAL LOTS. THE PROPOSED PROJECT AREA IS LOCATED IN A RURAL FORESTED SETTING, OUTSIDE THE MISSOULA CITY LIMITS. THE PROPOSED PROJECT WOULD BE EXPECTED TO REDUCE THE PROBABILITY OF THE SPREAD OF NOXIOUS WEEDS.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: NO IMPACTS.

AIR QUALITY WOULD NOT BE IMPACTED BY THE USE OF A WELL FOR DOMESTIC, LAWN AND GARDEN IRRIGATION AND STOCK WATERING.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: NO IMPACTS.

THE STATE HISTORICAL PRESERVATION OFFICE RECOMMENDS THAT NO CULTURAL RESOURCE SURVEYS ARE WARRANTED GIVEN THE EXTENT OF THE EXISTING GROUND DISTURBANCE.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: NO IMPACTS NOT ALREADY DISCUSSED.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: NO SIGNIFICANT IMPACTS.

THE PROPOSED PROJECT IS LOCATED WITHIN THE BOUNDARIES FO THE HAYES CREEK CONTROLLED GROUNDWATER AREA. ALL NEW GROUNDWATER DIVERSIONS ARE REQUIRED TO COMPLY WITH THE DNRC WATER USE PERMIT APPLICATION LAWS AND RULES TO OBTAIN A WATER RIGHT.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: NO IMPACTS.

THE PROPOSED PROJECT WILL NOT IMPAIR ACCESS TO RECREATIONAL OR WILDERNESS ACTIVITIES.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: NO IMPACTS.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: NO IMPACTS.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity?	NONE
(*b) Local and state tax base and tax revenues?*	MINOR
(c) Existing land uses?	MINOR
(*d) Quantity and distribution of employment?*	NONE
(e) Distribution and density of population and housing?	MINOR
(f) Demands for government services?	NONE
(g) Industrial and commercial activity?	NONE
(k) Utilities?	MINOR
(i) Transportation?	MINOR
(j) Safety?	NONE
(k) Other appropriate social and economic circumstances?	NONE

2 Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts NONE IDENTIFIED

Cumulative Impacts NONE IDENTIFIED

3. ***Describe any mitigation/stipulation measures:*** THERE ARE NO MITIGATION/STIPULATION MEASURES IDENTIFIED FOR THE PROPOSED ACTION.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: THE NO ACTION ALTERNATIVE IS THE ONLY ALTERNATIVE CONSIDERED FOR THE PROPOSED ACTION. UNDER THE NO ACTION ALTERNATIVE, THE APPLICANT WOULD BE UNABLE TO OBTAIN A WATER RIGHT FOR USE OF THE PROPOSED PROJECT WELL.

PART III. Conclusion

1. Preferred Alternative

2 Comments and Responses

3 Finding:
Based on the significance criteria evaluated in this EA, is an EIS required?
*Yes___ No_**X**__*

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: AN EA IS THE APPROPRIATE LEVEL OF ANALYSIS FOR THIS PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS HAVE BEEN IDENTIFIED AS A RESULT OF THE PROPOSED ACTION

Name of person(s) responsible for preparation of EA:

Name: PATRICK RYAN
Title: WATER RESOURCE SPECIALIST
Date: NOVEMBER 28, 2007